

In the claims

1. (Currently Amended) A low drop-out voltage regulator comprising:

transistor means for receiving a reference voltage and in dependence thereon producing a regulated output voltage [[;]] , the transistor means having an output stage for coupling to a load; and

first direct current (DC) control loop means coupled to the transistor means for providing a dominant pole; and wherein

second direct current (DC) control the transistor means further comprises at least part of output loop means, the output loop means for providing a non-dominant pole, whereby low output impedance for coupling across the load so as to provide stability of operation may be obtained with a lower by lowering a load capacitance of the load.
2. (Original) The low drop-out voltage regulator as claimed in claim 1 wherein the control loop means comprises:

differential amplifier means having an output coupled to the transistor means; and

voltage divider means coupled between the voltage regulator output and a first input of the differential amplifier means.
3. (Original) The low drop-out voltage regulator as claimed in claim 2 wherein the control loop means further comprises:

voltage reference means coupled between the voltage regulator output and a first input of the differential amplifier means.
4. (Previously presented) The low drop-out voltage regulator as claimed in claim 1 wherein the output stage comprises a low impedance output.
5. (Currently amended) A The low drop-out voltage regulator as claimed in claim 1 wherein the second direct current (DC) control output loop means is coupled to the voltage regulator output and first direct current (DC) the control loop means.

6. (currently amended) A The low drop-out voltage regulator as claimed in claim 1 wherein the second direct current (DC) control output loop means has a unity direct current (DC) gain.

7. (Previously presented) The low drop-out voltage regulator as claimed in claim 1 wherein the transistor means comprises a cascode transistor arrangement.

8. (Previously presented) The low drop-out voltage regulator as claimed in claim 1 wherein the output stage comprises a cascode transistor arrangement.

9. (Previously presented) The low drop-out voltage regulator as claimed in claim 1 wherein the output stage comprises a P-type transistor.

10. (Original) The low drop-out voltage regulator as claimed in claim 9 wherein the P-type transistor is a PMOS transistor.

11. (Cancelled)

12. (Currently Amended) A method for low drop-out voltage regulation comprising:
providing transistor means receiving a reference voltage and in dependence thereon producing a regulated output voltage; the transistor means having providing an output stage for coupled coupling to a load; and
providing first direct current (DC)-control loop means coupled to the transistor means for providing a dominant pole; and wherein
second direct current (DC) control the transistor means further comprises at least part of output loop means, the output loop means and providing a non-dominant pole, whereby low output impedance for coupling across the load so as to provide stability of operation may be obtained with a lower by lowering a load capacitance of the load.

13. (Original) The method for low drop-out voltage regulation as claimed in claim 12 wherein the control loop means comprises:

differential amplifier means having an output coupled to the transistor means; and voltage divider means coupled between the voltage regulator output and a first input of the differential amplifier means.

14. (Original) The method for low drop-out voltage regulation as claimed in claim 13 wherein the control loop means further comprises:

voltage reference means coupled between the voltage regulator output and a first input of the differential amplifier means.

15. (Previously presented) The method for low drop-out voltage regulation as claimed in claim 12 wherein the output stage comprises a low impedance output.

16. (Currently amended) The method for low drop-out voltage regulation as claimed in claim 12 wherein the ~~second direct current (DC) control output~~ loop means is coupled to the voltage regulator output and ~~first direct current (DC)~~ the control loop means.

17. (Currently amended) The method for low drop-out voltage regulation as claimed in claim 12 wherein the ~~second direct current (DC) control output~~ loop means has a unity direct current (DC) gain.

18. (Previously presented) The method for low drop-out voltage regulation as claimed in claim 12 wherein the transistor means comprises a cascode transistor arrangement.

19. (Previously presented) The method for low drop-out voltage regulation as claimed in claim 12 wherein the output stage comprises a cascode transistor arrangement.

20. (Previously presented) The method for low drop-out voltage regulation as claimed in claim 12 wherein the output stage comprises a P-type transistor.

21. (Currently Amended) The method for low drop-out voltage regulation as +claimed in claim 20 wherein the P-type transistor is a PMOS transistor.

22. (Cancelled)

23. (Previously amended) An integrated circuit comprising the low drop-out voltage regulator of claim 1.